

NIRS™ DS2500 F

Full confidence in your analysis of feed and raw materials







The NIRS™ DS2500 F analyser enables you to handle the variations in raw material supplies with confidence, optimise margins through better process control and ensure correct final product quality.

Always ready

Get the necessary data to manage, adjust and optimise your daily feed operations with the lowest possible downtime. NIRS™ DS2500 is easy to use and provides fast results in less than a minute, allowing you to act fast on important decisions. No use of chemicals ensures safe operations.

Results you can trust

Accurate and reliable results allow you to produce much closer to specification, avoid give-away of costly raw materials and handle quality issues with confidence. Pursue claims towards suppliers based on results you can trust and secure a fast pay-back on your investment.

Smart data management

Manage and apply data with efficiency and ease. Connect and manage multiple instruments using FossManager™ networking software, structure and monitor data flows with intelligent software features to and integrate with other systems using standard export/import functions or advanced API solutions.

Sample type

Direct measurements of feed and forage samples in ground or unground form, for example direct measurement of pellets

Parameters

FOSS global calibrations include: Fat, protein, moisture, ash, starch and crude fiber, as well as NDF and ADF for forage.

Access to relevant reference analysis makes it possible to develop additional calibrations for parameters such as amino acids and digestibility

Technology

NIR monochromator across the full spectral range from 850 to 2500 nm.

Factory standardisation ensures seamless transfer of calibrations

Specifications

Feature	Specification
Dimensions (w x d x h)	375 x 490 x 300 mm
Weight	27 kg
Degree of protection	IP 65
Measurement mode	Reflectance or transflectance (for liquids)
Wavelength range	850 - 2500 nm
Detector	Silicon (850 - 1100 nm), lead sulfide (1100 - 2500 nm)
Optical bandwidth	8.75 ±0.1 nm
Spectral resolution	0.5 nm
Number of data points	3300
Absorbance range	Up to 2 AU
Analysis time	<1 minute*
Wavelength accuracy	<0.05 nm
Wavelength precision (Based on a single analyser)	<0.005 nm
Wavelength precision instrument-to-instrument (Based on a group of analysers)	<0.02 nm
Photometric noise**	850 - 2500 nm < 20 micro au

Installation requirements

NIRS™ DS2500 F		
Voltage supply	100-240 V AC*, frequency 50-60 Hz, Class 1, protective earth	
Ambient temperature	5 - 40°C	
Storage temperature	-20 to 70°C	
Ambient humidity	< 93% RH	
Mechanical environment	Stationary during use	
EMC environment	Laboratory use, industry requirements	

^{*}Mains supply voltage fluctuations not exceeding $\pm 10\%$ of the rated voltage.

Instrument management	
Networking software	FossManager™

^{*} Adjustable ** Noise = RMS for 10 co-added, 10 second scans